

REMARKS

The Office Action dated May 16, 2005 has been reviewed carefully and the application has been amended in a sincere effort to place it in condition for allowance.

Claims 1-31 are in the application and are currently pending.

Claims 18-20 are allowed.

Claims 1-17 and 21-31 were rejected.

At paragraphs 1 and 2 of the Office Action claims 8, 11, 14 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No 6,731, 632 to Takahashi et al., which issued on May 4, 2004. ("Takahashi").

Representative Claim 8 states:

A system for transmitting data in a network, the data including at least one segment transmitted in at least one packet, the system comprising:
a memory configured to store instructions; and
a processor configured to execute instructions to:
generate a packet including at least one field of at least one pseudo-header and to insert it as extra octets in a place after a protocol header in accordance with a first protocol and before the protocol data in a data field, which implements constraints on the formatting of at least one field of the pseudo-header in such a manner to substantially satisfy requirements for procedures in accordance with a second protocol being used by a receiving device to which the packet is to be sent.

In sharp contrast, Takahashi is an internetworking system that uses a gateway device for enabling efficient communication between two separate networks that use differ-

ent protocols. The Takahashi system requires a “network management station.” Applicant’s invention avoids additional internetworking components and gateways by simply including a pseudo-header that incorporates the second protocol within the packet sent in accordance with the first protocol, for example.

Though Takahashi describes in Column 1, line 48, a hybrid frame that can be constructed by placing a header into the data field, such hybrid frames are expressly taught as being constructed by and transmitted through a network management system. The network management station is disposed as a gateway between the two devices which communicate in different protocols.

This teaches away from Applicant’s invention because Applicant’s invention allows instead direct communication between the transmitting device that uses a first protocol and the receiving device to which the packet is to be sent, which uses the second protocol. Takahashi does not disclose, teach or suggest transmitting a packet including the claimed pseudo-header to the receiving device, but instead requires a gateway.

Accordingly, Applicant respectfully urges that the Takahashi patent is legally precluded from rendering obvious Applicant’s claimed invention under 35 U.S.C. 103 because of the absence from the cited patent of Applicant’s claimed invention which includes instructions to *generate a packet including at least one field of at least one pseudo-header and to insert it as extra octets in a place after a protocol header in accordance with a first protocol and before the protocol data in a data field, which implements constraints on the formatting of at least one field of the pseudo-header in*

such a manner to substantially satisfy requirements for procedures in accordance with a second protocol being used by a receiving device to which the packet is to be sent.

Accordingly, it is respectfully submitted that claim 8, as amended, is in condition for allowance. Claim 30 depends upon claim 8 and is therefore also in condition for allowance. Claim 11 has been amended in a manner similar to claim 8 and thus it is respectfully submitted that claim 11 is also in condition for allowance. Claim 14 depends upon claim 11 and is therefore also in condition for allowance.

At paragraph 3 of the Office Action, claims 1, 3, 4, 5, 7, 9, 10, 12, 13, 16, 21, 22, 26-27, and 31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Takahashi in view of the United States Patent 6,711,743 to Hong et al. ("Hong").

The present invention as set forth in representative claim 1 comprises in part:

A method for transmitting data in the form of packets, the method comprising:
generating packets that include a header, a data field, and at least one pseudo-header;

formatting the packet header in accordance with the specifications of a first protocol;

formatting a pseudo-header in accordance with one or more additional constraints, such that the additional constraints substantially satisfy at least one additional procedure in accordance with a different protocol;

transmitting a data packet including a segment of data, a header and a pseudo-header to a receiving device;

receiving at least one reply packet from the receiving device, formatted in accordance with the first protocol; and

determining the validity of the received packet based on at least one additional processing step, including performing at least one computation using the pseudo-header field contained within the protocol data field after reception of the packet.

This is in sharp contrast to Takahashi's hybrid frames which are created by a network management system acting as a gateway between two networks A and B which use

different communication protocols. Applicant's invention does not require a gateway but instead involves direct communication between two devices, only one of which needs to be modified with the instructions in accordance with the claimed invention.

Hong's suggestion of checking a reply for errors does not teach checking a pseudo-header of a reply packet in accordance with the procedures as set forth in Applicant's claimed invention.

Furthermore, the combination of Takahashi's suggestion of a hybrid frame sent by a gateway with Hong's well-known error checking does not give rise to Applicant's simplification as set forth in claim 1 and the claims dependent therefrom.

Accordingly, Applicant respectfully urges that the neither Takahashi alone or Hong alone renders Applicant's invention obvious and that the combination of Takahashi and Hong does not disclose, teach or render obvious Applicant's claimed invention because of the absence of Takahashi and Hong and the combination thereof of Applicant's claimed steps of *generating packets that include a header, a data field, and at least one pseudo-header;*

formatting the packet header in accordance with the specifications of a first protocol;

formatting a pseudo-header in accordance with one or more additional constraints, such that the additional constraints substantially satisfy at least one additional procedure in accordance with a different protocol;

transmitting a data packet including a segment of data, a header and a pseudo-header to a receiving device;

receiving at least one reply packet from the receiving device, formatted in accordance with the first protocol; and

determining the validity of the received packet based on at least one additional processing step, including performing at least one computation using the pseudo-header field contained within the protocol data field after reception of the packet.

The claims separately rejected in paragraph 4 of the Office Action, are dependent upon allowable independent claims and therefore, similarly, are allowable.

Claims 18 -20 were allowed.

Summary

All of the rejections and objections have been addressed herein.

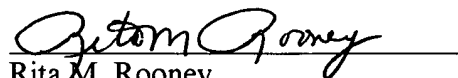
All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims, and therefore are in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,



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